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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,643	12/01/2004	Fabrizio Campanale	CH 020020	8779
24737 7590 02/20/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER RABOVIANSKI, ANTON I	
			ART UNIT	PAPER NUMBER
			2188	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/20/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/516,643

Applicant(s)

CAMPANALE, FABRIZIO

Examiner

Anton Rabovianski

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- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 4-8 and 12 is/are withdrawn from consideration. on the merits.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/01/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to the Application filed on 12/01/2004. Claims 1-12 are presented for examination. Claims 1-12 are pending.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 12/01/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. However, the foreign patent document DE 100 52 877 a1 is not considered by the examiner due to lack of a copy of a written English-language translation.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
 - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
 - (i) DETAILED DESCRIPTION OF THE INVENTION.
 - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
 - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
 - (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

Claims 4-8 and 12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-8 and 12 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "said data" in line 6. It is not clear how the entire data has been transferred to said volatile memory in step (b) since at least a part of said data is meant to be transferred in step (a). For the purpose of applying prior art this limitation is construed as "said part of said data". Claim 2

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recites the limitation "the data transfer". It is not clear which data transfer the claim refers to since a different data transfer is mentioned in steps (a), (b) and (c) in claim 1. For the purpose of applying prior art this limitation is construed as the data transfer as in step (a).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai et al. (US 5,974,528).

With respect to claim 1, the Tsai et al. reference teaches a method for writing data (DATA) from a processor (fig. 3, el. 310) to a non-volatile memory embedded in an integrated circuit (fig. 3, el. 330), comprising the following steps (a) at least part of said data (DATA) to be written to said non-volatile memory is transferred to a volatile memory (col. 8, lines 37-47), (b) when the part of said data (DATA) has been transferred to said volatile memory, a wait signal (wait) is sent to said processor (col. 8, lines 48-50), (c) said data (DATA) is transferred from said volatile memory to said non-volatile memory (col. 8, lines 50-59), (d) said wait signal (wait) is removed (col. 8, lines 59-65).

Regarding claim 2, Tsai et al. further teach the data transfer is controlled by an interface (col. 8, lines 37-47).

With respect to claim 3, Tsai et al. disclose at the beginning of the data transfer from the volatile memory to the non-volatile memory, said non-volatile memory is set in write mode (col. 8, lines 37-62).

With respect to claim 9, Tsai et al. disclose an integrated circuit with a processor (fig. 3, el. 310), a volatile memory (fig. 3, el. 340), a non-volatile memory (fig. 3, el. 330), and an interface connecting said processor to said volatile memory (fig. 3, el. 320), and said non-volatile memory to said volatile memory (fig. 3, el. 350), wherein said interface is equipped: to transfer data (DATA) to be written to said non-volatile memory first to said volatile memory (col. 8, lines 37-47), to send a wait signal (wait) to said processor when said data (DATA) is transferred to said volatile memory (col. 8, lines 48-50), to transfer said data (DATA) from said volatile memory to said non-volatile memory (col. 8, lines 50-59), and to remove said wait signal (wait) (col. 8, lines 59-65).

Regarding claim 10, Tsai et al. teach the non-volatile memory is a flash memory (col. 7, lines 41-44).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al. (US 5,974,528) in view of Official notice.

With respect to claim 11, the Tsai et al. reference does not disclose the volatile memory is a random access memory or a static random access memory. However, RAM/SRAM are types of memories that are well known in the art, and Official notice of this is hereby taken. It would have been obvious at the time of the invention to a person having ordinary skill in the art to have modified the system disclosed by Tsai et al. to include RAM memory instead of register set so that more volatile storage is provided using less chip area.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pashley et al. (US 6,418,506) disclose an integrated circuit memory for transferring data using a volatile memory to buffer data for a nonvolatile memory array. Leslie (US 5,717,887) discloses a system for the automatic substitution of control firmware embedded in a removable disk drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anton Rabovianski whose telephone number is 571-270-1026. The examiner can normally be reached on M-Th 9:00am-7:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

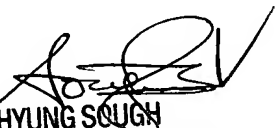
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR

Anton Rabovianski

February 12, 2007


HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
2-14-07